

E₁ 1. A method for downregulating HIV-1 fusion cofactor expression in a T cell, comprising contacting the T cell with a solid phase surface comprising an anti-CD28 antibody and an anti-CD3 antibody *in vitro*, thereby downregulating HIV-1 fusion cofactor expression in the T cell.

E₂ 55. A method for downregulating CCR5 expression in a T cell, comprising contacting the T cell with a solid phase surface comprising an anti-CD28 antibody and an anti-CD3 antibody *in vitro*, thereby downregulating CCR5 expression in the T cell.

E₃ Sub F1 60. A method for downregulating CCR5 expression in a T cell, comprising contacting the T cell with a solid phase surface comprising an anti-CD28 antibody and an anti-CD3 antibody *in vivo*, thereby downregulating CCR5 expression in a T cell.

E₄ Sub F2 75. A method for downregulating HIV-1 fusion cofactor expression in a T cell, comprising contacting the T cell with a solid phase surface comprising an anti-CD28 antibody and an anti-CD3 antibody *in vivo*, thereby downregulating HIV-1 fusion cofactor expression in the T cell.

OK to E₁ E₂ E₃ E₄ 87. The method of any one of claims 1, 55, 60, or 75, wherein the anti-CD3 antibody is an anti-human CD3 monoclonal antibody.

88. The method of any one of claims 1, 55, 60, or 75, wherein the anti-CD28 antibody is an anti-human CD28 monoclonal antibody.

89. The method of any one of claims 1, 55, 60, or 75, wherein said solid phase surface is a bead.

E₅ 90. The method of claim 89, wherein the bead is a magnetic immunobead.

91. The method of any one of claims 1 or 55, wherein said solid phase surface is a tissue culture dish.

92. The method of any one of claims 1, 55, 60, or 75, wherein the anti-CD3 antibody and the anti-CD28 antibody are immobilized on the solid phase via a covalent modification.

93. The method of any one of claims 1, 55, 60, or 75, wherein the anti-CD3 antibody and the anti-CD28 antibody are immobilized on the solid phase surface via an avidin-biotin complex.